

PDF Accessibility

Center For Community and Economic
Development Guidelines

Accessibility

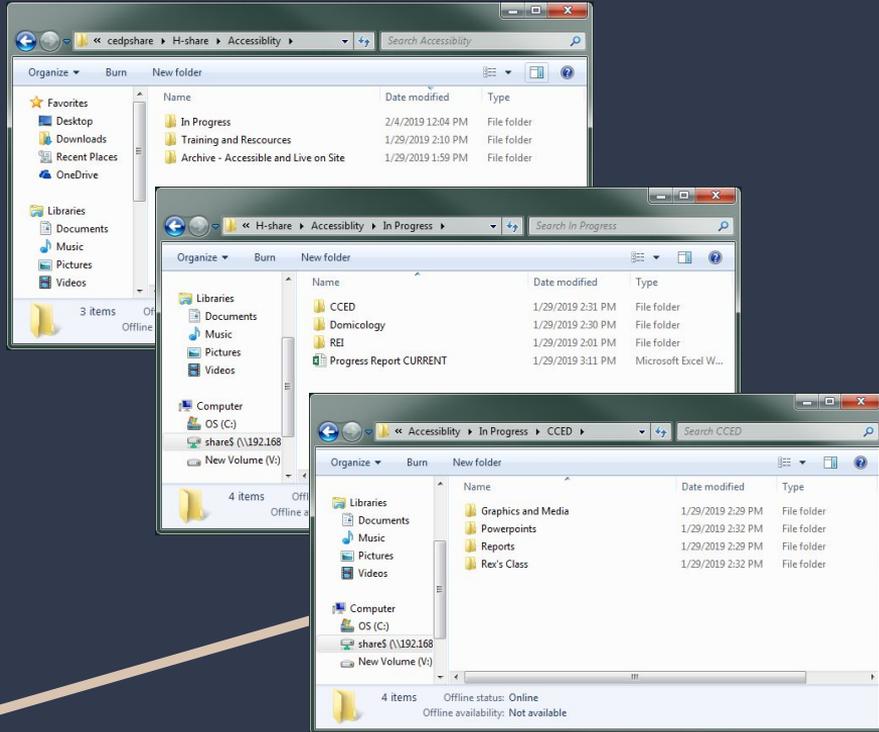
A system of hardware or software that makes documents usable for those with disabilities such as restricted mobility, deafness, blindness.

- Imagine a blind person aiming to understand a document on the computer, the computer software needs to be able to accurately read the text to them.
- What about images, graphs, graphics, tables or maps? That's where we come in, our goal is to caption things that are not already readable text, creating alternative text for the computer to read.
- We also create a reading order for each document, so that the computer reads everything in the correct order.

What You Will Do

1. Open **Acrobat** and change **Title, Show, and Language**.
2. Work in **Acrobat** to edit the **Reading Order** of the PDF document.
3. Work in **Word** to write up and organize the **Alternative Text** for the PDF document.
4. Work in **Acrobat** to add the **Alternative Text** to each Figure in the PDF document.
5. **Check your work** and make sure to keep the **Progress Report** updated at all times!

Navigation



Computer → share\$ (\\192.168.1.152) → Public → cedshare → **H - Share** → **Accessibility** →

There are 3 folders within Accessibility:

In Progress: All Folders of PDFs that are currently being made accessible, by you!

- They are split up by the different organizations, **CCED, Domicology and REI**. Within each organization PDFs are organized into folder by type of document.
- You will also find the **Progress Report** here

Training and Resources: Where you will find this Powerpoint and other Resources.

Archive: All folders of PDFs that have already been made accessible and are currently live on the site. (Do not add files to this folder unless directly instructed to)

Progress Report

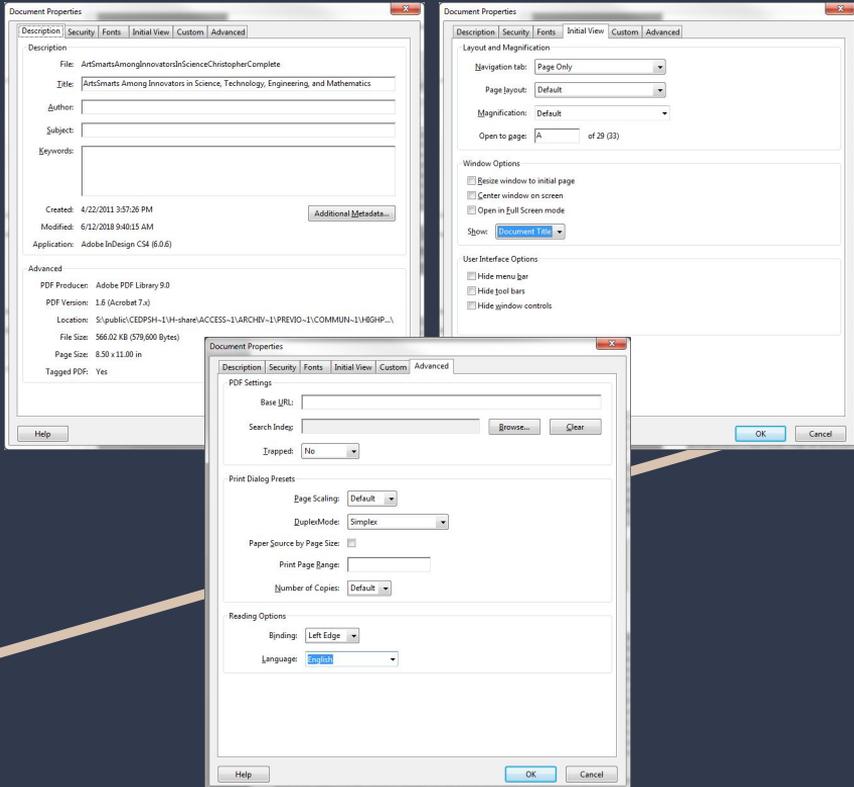
- Once you choose a PDF to work on the first thing you need to do is add your name and the status ('In Progress') to the Progress Report.
- This is important because if multiple people are working, we don't want them to accidentally work on the same PDF and do the same work twice!
- Within the progress report we have a sheet for each Organization, (CCED, REI, Domicology)
- All of the PDFs should be under 'File Name' in the sheet already, if a PDF or folder of PDFs are not on the spreadsheet, add them!

The screenshot shows an Excel spreadsheet with the following data:

1	CCED						
2	Category	File Name	Transcriber	Read Order Status (In Progress / Complete)	Alt Text Status (In Progress / Complete)	Screen Reader Check	Uploaded On Website
3	Reports	Community Bennefit Agreements					
4	Rex's Class	Session 2					
5		Session 3					
6		Session 4					
7		Session 7					
8		Session 8					
9		Session 19					
10		Session 19 Presentation Sector Analysis S Kurland					
11		Session 20					
12		Session 20 Video MHPN					
13		Session 21					
14		Session 24					
15		Session 26					
16		Session 29 Final Session					
17							
18							
19							

1.

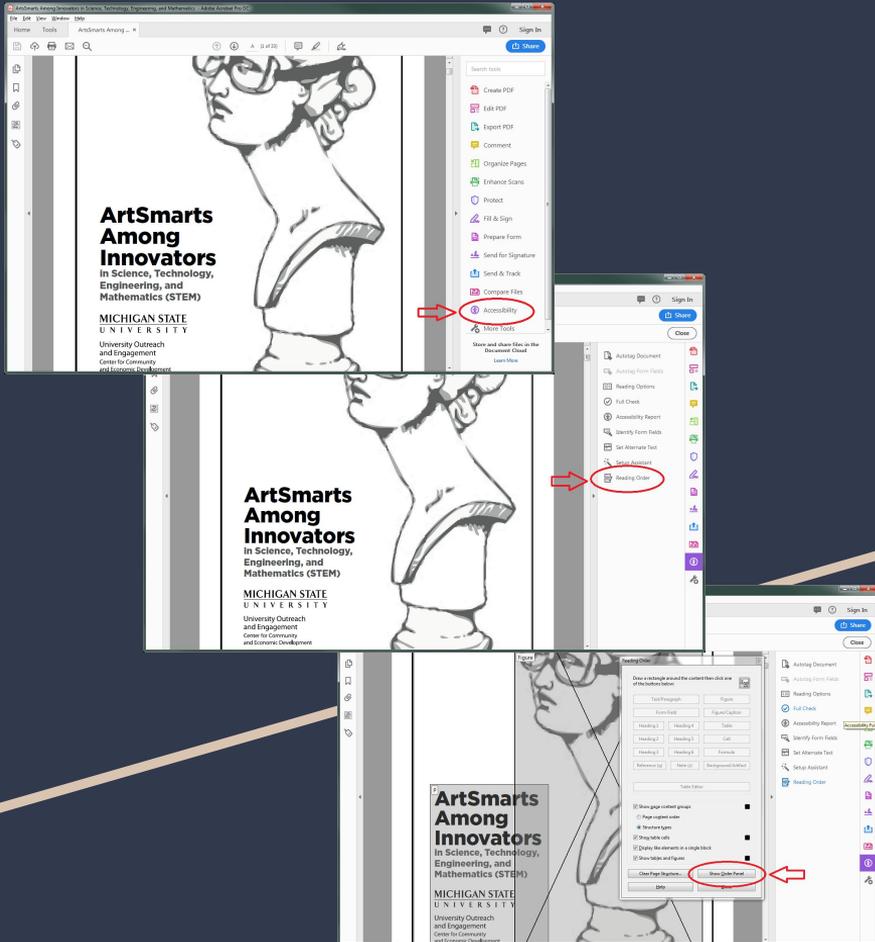
Open Acrobat and change Title, Show, and Language.



Before you do anything else, change the title and properties of the PDF within Acrobat:

- 1) **Go file → Properties → Description:** change **Title:** to title found on PDF's title page (author names optional)
- 2) **Go File → Properties → Initial View:** change **Show:** to 'Document Title'
- 3) **Go File → Properties → Advanced:** Change **Language:** to 'English'

Navigating Acrobat



Once you open up the PDF in Acrobat, we must navigate to the accessibility software.

On the right side of the page you will see a toolbar, from here click **'Accessibility'** (may have to look at 'more tools')

Now next to the toolbar click the option for **'Reading Order,'** and the reading order panel will pop up.

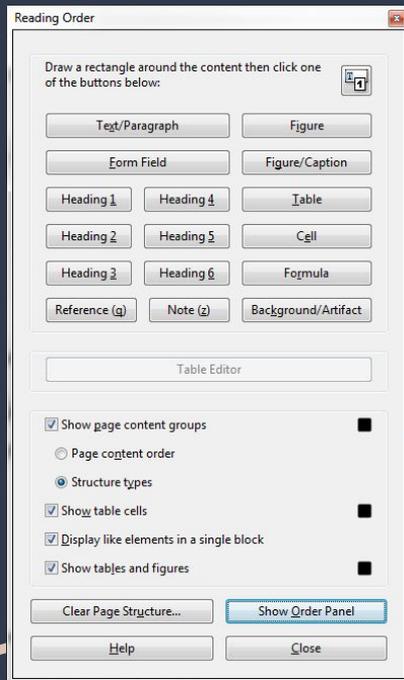
From here choose **'Show Order Panel,'** this will bring up the page numbers and page structure on the left.

Now you're ready to start working!

2.

Work in Acrobat to edit the Reading Order of the PDF document.

- We organize the text in the document with Reading Order by selecting and categorising each piece of the document.
- We tag 'Headings' which continue through the whole document, do not restart on each page.
- The title of the document as well as any other text that is not structuring anything, is tagged as 'Text / Paragraph.'
- Images, graphs, graphics are tagged as a 'Figure'
- Tables can sometimes be read as a 'Table,' other times we must make it a 'Figure.'
- To UN-SELECT parts of the page when working with oddly shaped items press Ctrl and select an area.



The Name of the Document is Text / Paragraph

The first heading is Heading 1

Any paragraph or text that is under headings is **Text / Paragraph**

This is a sub-heading of heading 1, so it is Heading 2

Any readable words that are not headings are always **Text / Paragraph**

This is a sub-heading of heading 2, so it is Heading 3

Remember, the same levels of headings continue throughout the whole document, **Text / Paragraph**

This heading is not a sub-heading, so we are back to Heading 1

Example

H1 ArtSmarts Among Innovators

H2 and Economic Development

Recent thinking argues that cultural assets, such as thriving arts sectors, play an important role in generating a globally engaged economy. A community's creative and cultural assets have three primary effects. First, a thriving arts sector functions as a jobs generator with direct economic benefits. Cultural assets, including art museums, orchestras, theatres, galleries, and ongoing arts education opportunities, serve as a source of jobs for personnel in the arts. According to the 1997 U.S. Economic Census, there are approximately 67,000 people employed in the creative enterprises of Michigan (Fernandez, Garg, & LaMore, 2005). Second, a thriving arts sector functions as a magnet for other innovative businesses. Cultural assets provide an enhanced quality of life that attracts and retains highly skilled, highly paid knowledge workers and innovators (Florida, 2002). Finally, an arts-enriched environment may also stimulate the creative capacity of current and future generations of workers (Pink, 2005). This study aims to explore how sustained training or involvement in the arts can lead to professional success in areas of science and innovation.

Figure - No alternate text exists. Arts training and involvement can be key to building an innovative economy.

H2 Background Research

2002, social scientist Richard Florida changed the economic development paradigm by introducing the concept of the creative class and proposing the idea that the creative class plays a crucial role in the knowledge economy. The creative class is a socioeconomic class made up of scientists and engineers, university professors, poets, and architects. It also includes "people in design, education, arts, music and entertainment, whose economic function is to create new ideas, new technology and/or creative content" (Florida, 2002, p. 8). Because of their knowledge-based jobs, Florida asserted that members of the creative class tend to contribute directly to the growth of a thriving economy. Equally important, members of the creative class tend to prefer those jobs in geographical locations with high levels of culture and diversity. Florida thus argues that regions which support the arts will attract and retain the creative class and, consequently, enjoy higher levels of economic prosperity. This study addresses the role of arts exposure in the life of innovators. We explore whether arts exposure and arts practice play any role in nurturing the innovative thinking of science/technology entrepreneurs. Additionally, we aim to understand how and why the creative class—science and technology entrepreneurs in particular—may be attracted to communities rich in arts opportunities.

Research suggests that exposure to the arts can develop creative potential in the young (Western Michigan University Research Foundation, 2005). Creative potential, in turn, enhances problem-solving and critical thinking skills essential to success in an information- and innovation-based economy. For example, students with four years of arts or music classes in high school and college score higher on the Standardized Aptitude Test (SAT). These students score an average of about 150 more points on verbal and 70 points on math and tend to earn higher grades than students who are not engaged in any fine arts; see for example National Association for Music Education (MENC), 2008. Overall, the impact of arts education is greater than the impact of science education or computer training on raising overall SAT scores.

The scholarly study of eminent individuals suggests that arts training and involvement achieves such ends by influencing certain styles of thinking consistent with creativity and innovation. More than a century ago, Nobel

2 | ArtSmarts and Innovators in Science, Technology, Engineering, and Mathematics

Rain (Text / Paragraph)

Rain Storms (Heading 1)

Thunder (Heading 2)

Thunder is the sound of lightning. (Text / Paragraph)

Sound of thunder (Heading 3)

It comes after the lightning because sound travels slower than light. (Text / Paragraph)

Lightning (Heading 2)

Lightning is a

(Text / Paragraph)



(Text / Paragraph)

(Figure)

(Text / Paragraph)

(Text / Paragraph)

Figures

We must write Alternative Text for Figures because the computer can not read them.

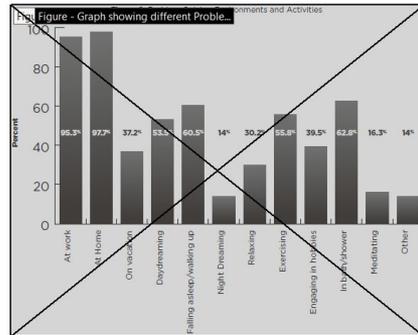


 Figure - No alternate text exists.
                                                           

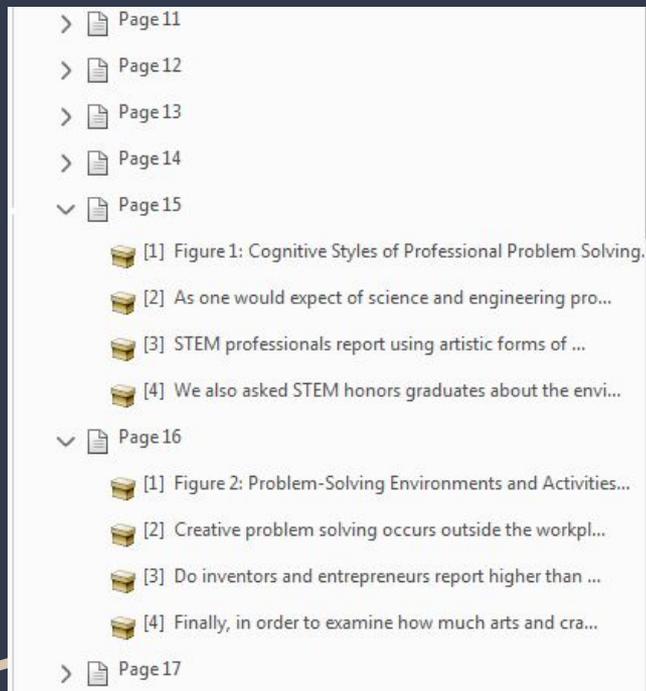
                                                           

Reading order



Reading order panel, to left of PDF in Acrobat

- Once you have gone through and added a category to every item on a page, you will be able to see a list of items on each page in the order panel.
- We need to make sure that this list is in order of how you would read it on the page, we do this as we go on every page.
- To move the items around simply drag them, but make sure to **ONLY DRAG DOWN**, acrobat can crash if you drag up.
- The numbers start from 1 on every page, in writing Alternative Text you will need to refer to these numbers.

Saving Reading Order in Acrobat

This is what your saving for each documents folder should look like

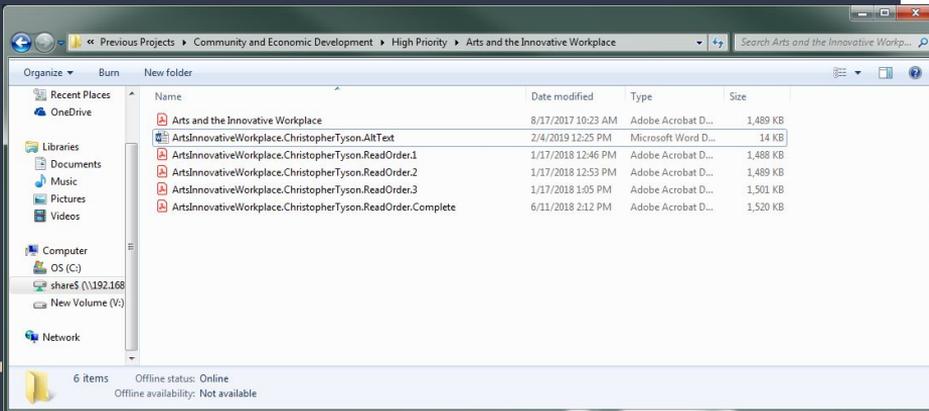
- Save PDF documents as a new copy each session that you work on them, numbering them as you go. (Acrobat likes to crash).
- Also be sure to quick save regularly as you work
- Change the name to whatever is on the actual title page of the PDF document.

Example: **DocumentTitle.YourName.#**

- When it is complete, replace the number with 'Complete.'

Example: **DocumentTitle.YourName.Complete**

- Make sure you are saving in that PDF's specific folder.
- Each time you work make sure to update the **Progress Report**, entering your name and the progress status for the specific PDF document.



3. Work in Word to write up and organize the **Alternative Text** for the PDF document.

- Alternative Text is the captions that we create for every figure in the PDF document.
- Alternative Text is meant to be as simple and straight forwards as possible
- We must create Alternative Text for every item in the PDF which is not able to be read by the computer, and which we have categorized as a figure.

Alternative Text Tips

- Alternative text is meant to convey the important aspects of an image to a user, and it always depends on context (the same photograph can have totally different alternative text if used in different places for different purposes).
- Alternative text should always start with the most important information, and work down to smaller details.

Images



Correct:

Person riding a bike in the mountains in front of a rainbow.

Incorrect:

A picture of a person wearing overalls, a yellow shirt and a bike helmet riding dangerously close to the edge of a mountain. In the background there is a rainbow and clouds, you can faintly see another mountain and rainbow too.

Logos



SPARTAN**NEWS**ROOM
POWERED BY THE  MICHIGAN STATE UNIVERSITY SCHOOL OF JOURNALISM

Correct:

McDonald's "I'm lovin' it".

Incorrect:

The McDonald's M Logo in yellow on a red background with the words I'm lovin' it in white underneath the M.

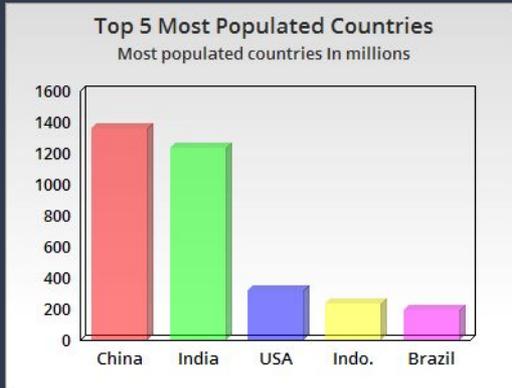
Correct:

Spartan NewsRoom, Powered by the Michigan State University School of Journalism.

Incorrect:

Logo for Spartan NewsRoom, the word news is bolded and underneath it says powered by the Michigan State University School of Journalism. There is a spartan head between the words the and Michigan.

Graphs



Correct:

Graph showing Top 5 Most Populated Countries, most populated countries in millions. For China, the population is about 1400 million. For India, the population is about 1250 million. For USA the population is about 350 million. For Indonesia the population is about 200 million. For Brazil the population is about 170 million.

Incorrect:

China is in red and has the most, india is in green and has the second most, USA is in blue and has the third most, then is indo then is Brazil.

(Do not mention colors unless it is pertinent to understanding the graph)

Tables

Season Totals

	# of Wins	# of Losses	# of Ties
Red Team	5	5	0
Blue Team	4	5	1
Green Team	6	3	1

For tables, always make sure to check if the computer can process it on its own first. Do this by selecting the whole thing and seeing if it grabs each word in the table, or just the outline. If it is just the outline the computer can't read it, so you must caption it:

Correct:

Season totals for red blue and green team. The red team won 5 times, lost 5 times and tied 0 times. The blue team won 4 times, lost 5 times and tied 1 time. The Green team won 6 times, lost 3 times and tied 1 time.

Incorrect:

A table that is showing the season totals for the red blue and green team.

Maps



Correct:

Map showing the Accelerator programs by MSA (2015) in the United States of America. Most of the accelerator programs are in the northern east side of the country, there are a few on the west coast and a few in Texas and other southern states. The source is Pitchbook data, primary research, author's calculations from metropolitan policy program at brookings.

Incorrect:

A map of the USA showing accelerator programs by MSA 2015.

More Tips

- Do not say “A” or “this.” No need to say Logo.

Example:

“A Logo for Michigan State University”
vs. “Michigan State University”

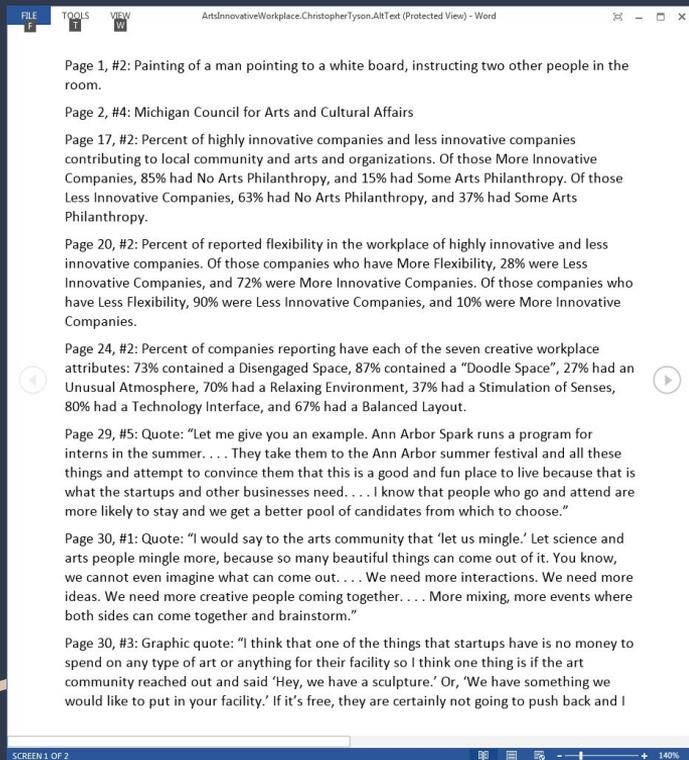
“This map is showing Lansing...” vs. “Map of Lansing...”

“A bar Graph that is showing...” vs. “Graph showing...”

“An image of people running...”
vs. “People running...”

- If there is any text on the figure that is relevant to understanding, you must include it in the alternative text.

Organizing in Word



Before each piece of Alternative text write:

Page #, Reading Order #: Alternative text

Example:

Page 7, #4: Alternative text

Page 7, #5: Alternative text

Page 8, #1: Alternative text

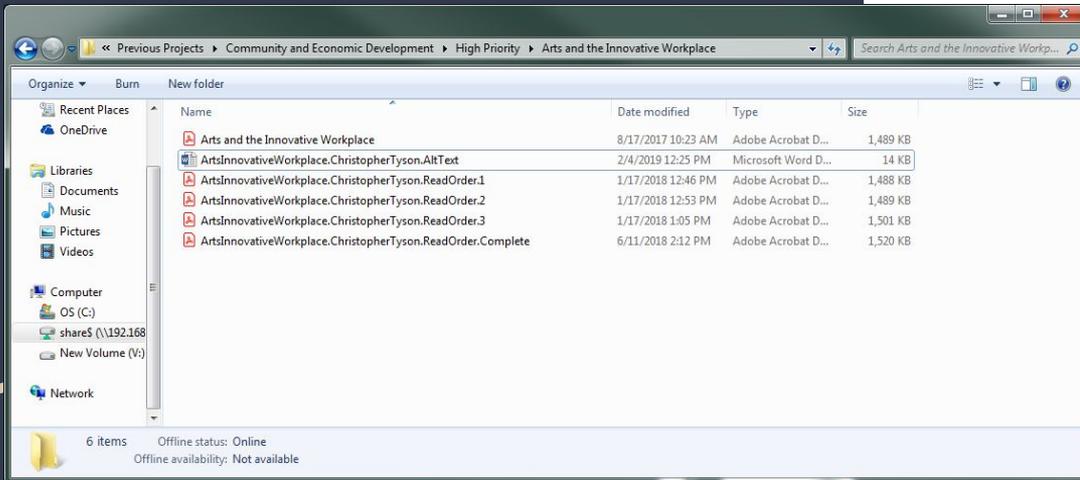
IMPORTANT: Use page numbers from Acrobat's sidebar (reading order panel), NOT the physical numbers on the page.

Saving Alternate Text Word Documents

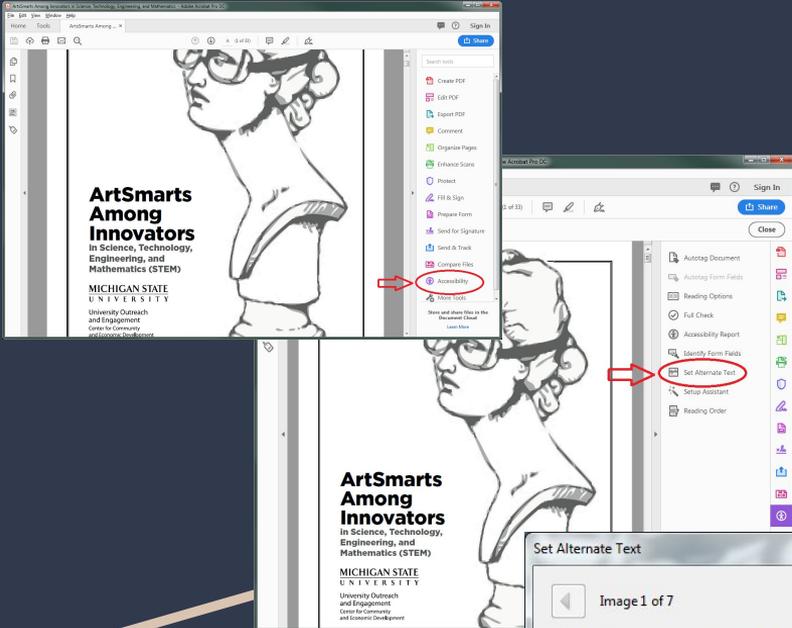
This is what your saving for each documents folder should look like

- You do not have to save a new copy every time you work on it.
- Make sure it is saved in the same folder as the PDF it corresponds to.
- When it is complete add “.Complete” to the end.
- Save your word document as:

DocumentTitle.YourName.AltText



4. Work in Acrobat to add the Alternative Text to each Figure in the PDF document.



To add the Alternative text to the document you will copy and paste, while checking your work, from word into Acrobat.

Click on '**Accessibility**' in the toolbar, then you will click '**Set Alternate Text**'.

A '**Set Alternate Text**' window will pop up.

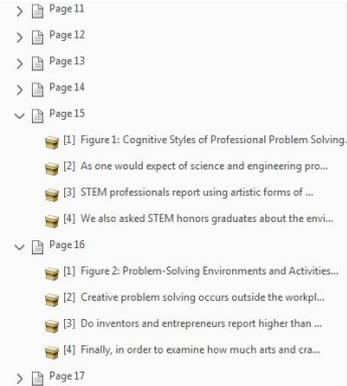
Simply locate the correct alternative text for a figure from your word document and paste it in.

Make sure to check your work!

5.

You're Almost Done!

- Go through and check the entire document (click on the first item on the first page in the order panel on the left, then use the down arrow key to go through each item and make sure it's in correct order and your alt text is all in.)



- Save the final version in the correct folder / format with “complete” at the end.
- Update the progress report to indicate that you have completed making the PDF accessible and it is ready to be put on the website.

Troubleshooting

Unfortunately Acrobat has A LOT of glitches.....

- Figures or Text will sometimes go blank after you categorize them.
FIX: Move the item down to the last item on the list in the order panel. (to get it back to the correct order, move the other items down, never move items up!)
- Figures or text will go blank without being categorized.
FIX: Select the area that the text / figure was in, it should still select the item in blue. Categorize it, then move the item down to the last item on the list in the order panel.
- If this doesn't work then you will have to restart from the last saved version.
- If the problem persists report it to Maddy or Ashita.